

# **Public Information Meeting**

# Meeting Federal Requirements for BART, NOx RACT and CAIR



### Purpose

- Provide Information to the Public on BART, RACT and CAIR
- Present Options for Meeting Clean Air Act Requirements
- ◆Collect Feedback on the General Approaches and on Specific Questions

### Air Pollution Health Effects

#### Ozone

- Decreased lung function
- ♦ Increased asthma attacks
- Depressed immune system
- Change in lung structure
- Potential premature death impact



### Fine-Particles

- Premature death
- Decreased lung function
- Increased asthma attacks and chronic bronchitis
- Acute respiratory symptoms
- Respiratory and cardiopulmonary related hospital admissions
- Increased work and school absences



### **Environmental Effects of Air Pollution**

- ◆ Reduced visibility
- Reduced crop and forest yields
- ◆Interference with ecosystems
- Acidification of lakes and streams
- Damage to buildings and materials

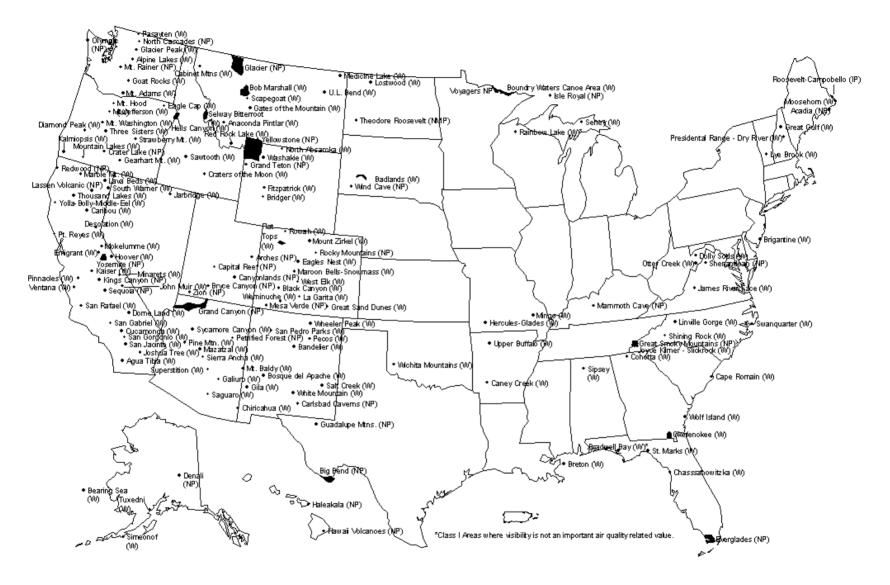


## BART and Haze



# What are the basic CAA requirements for visibility in Wisconsin?

- ◆EPA's Regional Haze Regulation
  - Protects Scenic Vistas in 156 Class 1 Areas in Country
  - ◆ No Anthropogenic Effect on Visibility by 2064
  - ◆ Reasonable Progress Deadlines (2018)
- ◆There are no Class 1 areas in the State where visibility is an air quality related value.



Map of 156 National Park and Wilderness Areas Protected by EPA's Regional Haze Rule



### Haze Schedule

- Best Available Retrofit Technology (BART) for Several Major Industrial Sources and Several Power Plants
  - ◆ Hearing Authorization Mid 2006
  - ◆ Rule Adoption Late 2006
- ◆ Various Other Rules Limiting SO<sub>2</sub> and NOx Emissions to Meet Visibility Requirements
  - ♦ Hearing Authorization Early 2007
  - ◆ Rule Adoption Late 2007
  - ◆ Plan Due to EPA January 2008



## NOx RACT and Ozone



# What are the designations for 8-hour ozone nonattainment areas in Wisconsin?

- ◆ 5 Nonattainment Areas in Wisconsin
  - ◆ Milwaukee Area (Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha Counties) Moderate
  - ◆ Sheboygan County **Moderate**
  - ◆ Manitowoc Basic
  - ◆ Kewaunee **Basic**
  - ◆ Door Basic
- ◆Basic areas have slightly different control requirements.

### Region 5 Ozone Nonattainment Areas

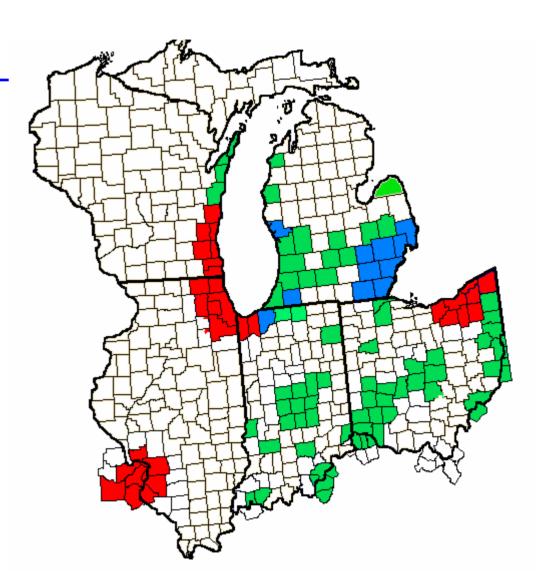


DEPT. OF NATURAL RESOURCES



Subpart 1 or "Basic" areas.







### Ozone Schedule

- ◆RACT Reasonably Available Control Technology for Major Sources of NOx
  - ◆ Plan Due to EPA September 2006
  - ♦ Hearing Authorization Summer 2006
  - ◆ Rule Adoption Late 2006
- Attainment Demonstration
  - ◆ Plan Due to EPA June 2007
  - ◆ Hearing Authorization for Various Rules to Limit Emission of NOx and VOC – Late 2006 to Early 2007
  - ◆ Rule Adoption Mid 2007



# Interstate Transport of Air Pollutants and CAIR



### What is the CAIR?

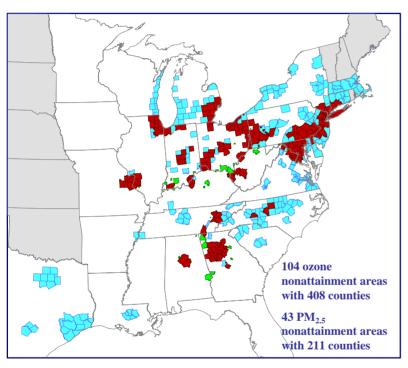
- **♦**Clean Air Interstate Rule
- ◆EPA Rule Requiring SO<sub>2</sub> and NOx Reductions from Power Plants in Eastern US
- ◆EPA is strongly encouraging states to meet the rule requirements through a Federal trading programs.

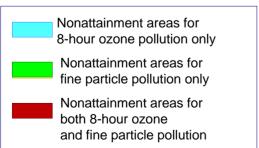
#### **CAIR States** WA. MT ND MN MA OR ID NY WIL SD MI WY PA Qη. IA. ΝE OH NVIN IL UT WV/ MD CA V/A CO KS MO KY DC. NC TN ŌΚ AZSC AR NM GA ALMS LA. $\mathsf{TX}$ Н FL ozone and particles ozone only particles only not covered by CAIR AΚ

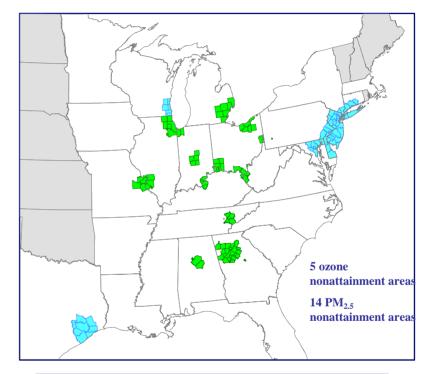
# Ozone and Particle Pollution: CAIR, together with other Clean Air Programs, Will Bring Cleaner Air to Areas in the East - 2015

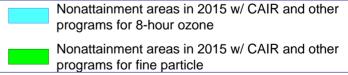
Ozone and Fine Particle Nonattainment Areas (March 2005)

Projected Nonattainment Areas in 2015 after Reductions from CAIR and Existing Clean Air Act Programs













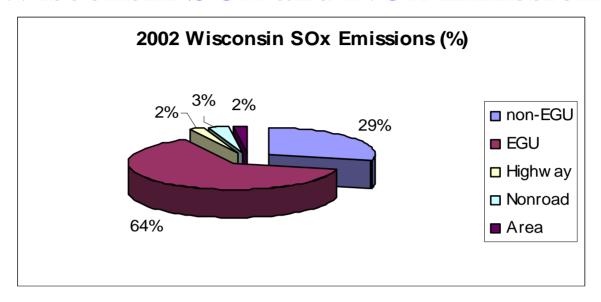
### CAIR Schedule

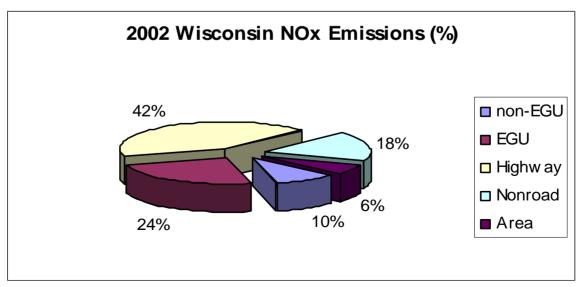
- ◆State Administrative Rule to Implement CAIR in Wisconsin
  - ◆ Hearing Authorization Mid 2006
  - ◆Plan Due to EPA September 2006
  - ◆ Rule Adoption Late 2006



# Controlling Emissions in Wisconsin

### Wisconsin SOx and NOx Emissions

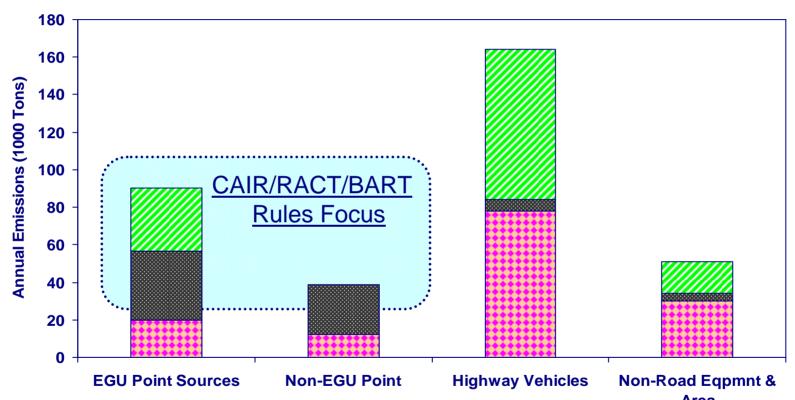




### NOx Regulatory Focus

#### Projected & Potential Reductions to 2002 NOx Emissions by Sector

■ 2012 Residual Emissions\* ■ 2012 Potential Controls ■ 2012 Committed Reductions\*\*



<sup>\*</sup> Residual emissions would be the projected level of residual NOx from all sector sources assuming all identified potential controls are installed/implemented. For point sources this would reflect the lowest achievable system NOx emission rate using reasonably available controls. Conceptually this could reflect RACM applied on a statewide basis.

<sup>\*\* 2012</sup> Committed Reductions includes fleet turnover to Vehicles & Equipment/Engines meeting New Federal Tailpipe Standards and Enforceable EGU Controls with planned installation by 2012.



### **Emission Reduction Cost Effectiveness**

Source Type	$SO_2$	NOx
	(\$/ton reduced)	(\$/ton reduced)
EGUs	1,000 to 2,000	1,000 to 2,000
Coal ICI Boilers	600 to 4,500	400 to 7,000
(50% Capacity Factor)		
Highway Vehicles	N/A	1,000 to 200,000
(Typical)		>13,000
Off –Road	N/A	>13,000
Equipment		



# What if we do not comply with Clean Air Act requirements?

- **♦** Sanctions
  - ◆Offsets and Highway Funds
- ◆Federal Implementation Plan
- ◆Sanctions occur 6 months after failure to submit the necessary plan.
- ◆FIP may be coincident with sanctions.



### How are we involving the public?

- ◆Public Information Meetings –BART, RACT, CAIR
  - ◆ March 29, 2006 Wausau
  - ◆ April 5, 2006 Manitowoc
  - ◆ April 6, 2006 Milwaukee
- More Public Information Meetings as Plans Are More Fully Developed
- ◆ Normal Public Hearings on Rules with 30 Day Notice and Comment Period after the Hearing